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PTO/SB/08A (10-86)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO			Complete If Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number		09/749,282
			Filing Date		December 26, 2000
			First Named Inventor		Gene R. Anderson
			Group Art Unit		2874
(use as many sheets as necessary)			Examiner Name		Rahill, Jerry T.
Sheet	1	of	3	Attorney Docket Number	1613370-0011

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
JTR		US - 4,329,190	05-11-1982	Berg et al.	
JTR		US - 4,479,698	10-30-1984	Landis et al.	
JTR		US - 4,563,725	01-07-1986	Kirby	
JTR		US - 4,709,979	12-01-1987	Spodati et al.	
JTR		US - 4,729,623	03-08-1988	Mery	
JTR		US - 4,730,198	03-08-1988	Brown et al.	
JTR		US - 4,767,430	08-30-1988	Deneka et al.	
JTR		US - 4,772,123	09-20-1988	Radner	
JTR		US - 4,836,645	06-06-1989	Lefevre et al.	
JTR		US - 5,054,879	10-08-1991	Brown	
JTR		US - 5,214,444	05-25-1993	Kerr et al.	
JTR		US - 5,535,296	07-09-1996	Uchida	
JTR		US - 5,539,848	07-23-1996	Galloway	
JTR		US - 5,630,988	05-20-1997	Stolp	
JTR		US - 5,790,733	08-04-1998	Smith et al.	
JTR		US - 5,818,990	10-06-1998	Steijer et al.	
JTR		US - 5,879,173	03-09-1999	Poplawski et al.	
JTR		US - 5,914,976	06-22-1999	Jayaraman et al.	
JTR		US - 5,940,562	08-17-1999	Henson et al.	
JTR		US - 5,963,693	10-05-1999	Mizue et al.	
JTR		US - 5,963,696	10-05-1999	Yoshida et al.	
JTR		US - 6,203,339	02-08-2000	Haugsjaa et al.	
JTR		US - 6,040,624	03-21-2000	Chambers et al.	
JTR		US - 6,170,996	01-09-2001	Miura et al.	
JTR		US - 6,195,261	02-27-2001	Babutza et al.	
JTR		US - 6,217,231	04-17-2001	Mesaki et al.	
JTR		US - 6,249,637	06-19-2001	Weigel	
JTR		US - 6,250,820	06-26-2001	Melchior et al.	
JTR		US - 6,305,848	10-23-2001	Gregory	
JTR		US - 6,325,551	12-04-2001	Williamson III et al.	
JTR		US - 6,354,747	03-12-2002	Irie et al.	
JTR		US - 6,396,191	05-28-2002	Hagelstein et al.	
JTR		US - 6,404,792	06-11-2002	Yamamoto et al.	

Jerry Rahill 3/21/05

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.*	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T*
		Country Code ³	Number ⁴	Kind Code ⁵ (If Known)			
JKR		GB	1 304 428 A	01-24-1973	General Elec.		
JKR		JP	56 046573	04-17-1981	Hitachi Ltd.		
JKR		JP	56 079468	06-30-1981	Matsushita		
JKR		JP	56 111822	09-03-1981	Oki Densen KK		
JKR		JP	60 156023	08-16-1985	Tateishi Denki		
JKR		JP	01 073304 -	03-17-1989	Furukawa Elec.		
JKR		DE	40 02 370	08-01-1991	Standard Elek.		
JKR		EP	0 440 336 A2	08-07-1991	Amphenol Corp.		
JKR		DE	41 23 370 A1	01-21-1993	Robock		
JKR		JP	05 102529	04-23-1993	NEC Corp.		
JKR		EP	0 589 622	03-30-1994	American Tele.		
JKR		JP	08 082724	03-26-1996	Fujitsu		
JKR		JP	09 043456	02-14-1997	NEC Corp.		
JKR		JP	09 061683	03-07-1997	Fuji Elec.		
JKR		JP	09 197197	07-31-1997	Furukawa Elec.		
JKR		JP	10 186162	07-14-1998	Furukawa Elec.		
JKR		WO	98 31080	07-16-1998	W.L. Gore et al.		
JKR		JP	10 239569	09-11-1998	Asahi Glass Co.		
JKR		JP	10 197751	10-31-1998	Hitachi Cable		
JKR		WO	99 39230	08-05-1999	Bueschelberger		
JKR		WO	00 46623	08-10-2000	Siemens		
JKR		EP	1 028 340 A1 -	08-16-2000	NEC Corp		
JKR		EP	1 028 341 A2	08-16-2000	Hewlett-Packard		
JKR		WO	00 73833 A1	12-07-2000	E20 Commun.		

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CLP	5/20/93	ROBINSON, et al., Low Cost Molded Packaging for Optical Data Links, 1994 IEEE Journal, pp. 312-316	
APR	5/20/93	NAGAHORI, et al., 1-Gbyte/sec Array Transmitter and Receiver Modules for Low-Cost Optical Fiber Interconnection, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 255-258	
JTR	5/20/93	NIBURG et al., A Complete Sub-System of Parallel Optical Interconnects for Telecom Applications, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 259-263	
JTR	5/20/93	de PESTEL et al., Parallel Optical Interconnections for Future Broad Band Systems, Based on the "Fiber in Board Technology", 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 264-266	
JTR	5/20/93	WONG et al., OptoElectronic Technology Consortium (OETC) Parallel Optical Data Link: Components, System Applications and Simulation Tools, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 269-278	
JTR	5/20/93	LEBBY et al., Characteristics of VCSEL Arrays for Parallel Optical Interconnects, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 279-291	
JTR	5/20/93	CROW et al., The Jitney Parallel Optical Interconnect, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 292-300	
JTR	5/20/93	HAHN et al., Gigabyte/sec Data Communications with the POLO Parallel Optical Link, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 301-307	
JTR	5/20/93	LIU et al., Polymer Optical Interconnect Technology (POINT) – Optoelectronic Packaging and Interconnect for Board and Backplane Applications, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 308-315	
JTR	5/20/93	SWIRHUN et al., The P-VixeLink™ Multichannel Optical Interconnect, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 316-320	
JTR	5/20/93	CARSON et al., Low-Power Modular Parallel Photonic Data Links, 1996 Electronic Components & Technology Conference, 46 th Proceedings, pp. 321-326	
JTR	5/20/93	KIBAR et al., Power Minimization and Technology Comparisons for Digital Free-Space Optoelectronic Interconnections, 1999 Journal Of Lightwave Technology, Vol. 17, No. 4, pp. 546-555	
JTR	5/20/93	SIMONIS et al., 1 Gb/s VCSEL/CMOS Flip-Chip 2-D-Array Interconnects and Associate Diffractive Optics, 1999 Parallel Interconnect (PI '99), pp. 1-9	

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		Filing Date	December 26, 2000
		First Named Inventor	Gene R. Anderson
		Group Art Unit	2874
<i>(use as many sheets as necessary)</i>		Examiner Name	Rahill, Jerry T.
Sheet	1	of	1
		Attorney Docket Number	1613370-0011

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

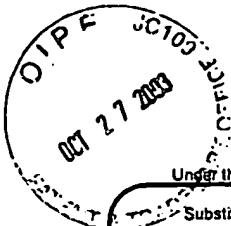
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		
JTR			WO 97 25638	A3	07-17-1997	Siemens
JTR			WO 97 25641		07-17-1997	Siemens AG
JTR			EP 0 790 678	A2	08-20-1997	Alcatel
JTR			JP 10 126002		08-31-1998	Matsushita
JTR			EP 0 899 592		03-03-1999	Bosch, Robert
JTR			EP 0 607 700	B1	08-25-1999	Sharp
JTR			WO 00 13051	A1	03-09-2000	Digital Optics
JTR			EP 0 974 856	A2	11-02-2000	Honeywell

Examiner Signature		Date Considered	3/2/05
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

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Application Number	09/749,282
Filing Date	December 26, 2000
First Named Inventor	Gene R. Anderson
Art Unit	2874
Examiner Name	Rahill, Jerry T.
Attorney Docket Number	1613370-0011

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JKR		EP 0 259 888 A2	03-16-1988	NEC Corporation		
JKR		EP 0 607 700 A	07-27-1994	Semicond. Laser		
JKR		EP 0 710 861 A1	05-08-1996	Sumitomo Elect.		

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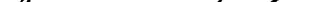
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First Named Inventor	Gene R. Anderson
Art Unit	2874
Examiner Name	Rahill, Jerry T.
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NON-PATENT LITERATURE DOCUMENTS

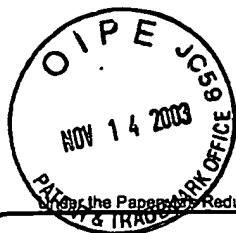
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